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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,197	03/17/2004	Claus D. Buergelt	5853-371	3776

30448 7590 01/29/2007

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EXAMINER	
OGUNBIYI, OLUWATOSIN A	
ART UNIT	PAPER NUMBER
1645	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/802,197	BUERGELT ET AL.	
	Examiner	Art Unit	
	Oluwatosin Ogunbiyi	1645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 November 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *15-20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☒ Claim(s) *1,2,6,10,14* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/22/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicant(s) reply to the restriction requirement received 11/17/2006 is acknowledged and has been entered into the record.

Election/Restrictions

Applicant's election without traverse of Group I, claims 1-14 in the restriction requirement mailed 10/17/2006 is acknowledged.

Group II, claims 15-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Priority

Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged.

Drawings

The drawings in this application have been accepted. No further action by Applicant is required.

Specification

The disclosure is objected to because of the following informalities: The use of the trademark VACUTAINER™ has been noted in this application on pg. 6 line 24. The use of the trademark FICOLL-PAQUE™ is also noted although spelled incorrectly as FICOLL -ISOPAQUE™ on page 6 line 26.

The trademarks should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner, which might adversely affect their validity as trademarks.

Appropriate correction is required.

Information Disclosure Statement

The information disclosure statement filed 11/22/2004 has been considered. An initialed copy is enclosed.

Claim Objections

Claim 14 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

The claim is drawn to a method for detecting a Map infection in an animal, the method (A) providing a biological sample from the animal; and (B) subjecting the biological sample to nested PCR using at least a first pair of primers for amplifying the ISO900 region of the Map genome and a second pair of primers for amplifying a portion of the amplified ISO900 region, wherein the presence of an amplification product specific for Map in the PCR reaction mixture indicates that the animal is infected with Map, (claim 14) wherein the first set of primers consist of the primers P90 and P91.

Claim 14, which recites 'wherein the first set of primers consist of the primers P90 and P91', broadens the independent claim (claim 6) from which it depends. Claim 6 recites 'subjecting the biological sample to nested PCR using at least a first pair of primers...'. The scope of 'first set of primers' in claim 14 is broader than the scope of 'first pair of primers' in claim 6 as 'first set of primers' encompasses more than one pair of primers.

Claims 1,2,6 and 10 are objected to because of the following informalities: claims (1,2,6,10) contain the acronym Map which is shorthand for *Mycobacterium avium* subsp. *paratuberculosis* (specification page 1 line 14-15). Claims 1 and 6 also contain the acronym PCR that is shorthand for polymerase chain reaction. While acronyms are

permissible shorthand in the claims, the first recitation should include the full recitation followed by the acronym in parenthesis. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a method of detecting Map infection in an animal the method comprising DNA extraction from a biological sample obtained from the animal, subjecting the extracted DNA to PCR using primers SEQ ID NO 1 and SEQ ID NO 2, detecting a 333 base pair amplification product or detecting a specific amplification product using primers for amplifying the IS900 region of the Map genome by nested PCR, does not reasonably provide enablement for a method of detecting Map infection by PCR amplification directly from a biological sample without first performing a DNA extraction step. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

Claims (1-5) are drawn to a method for detecting a Map infection in an animal, the method comprising the steps of (A) providing a biological sample from the animal; and (B) subjecting the biological sample to PCR using primers J1 and J2, wherein the presence of an amplification product specific for Map in the PCR reaction mixture indicates that the animal is infected with Map.

Claims (6-14) are drawn to a method for detecting a Map infection in an animal, the method comprising the steps of: (A) providing a biological sample from the animal; and (B) subjecting the biological sample to nested PCR using at least a first pair of

primers for amplifying the ISO900 region of the Map genome and a second pair of primers for amplifying a portion of the amplified ISO900 region, wherein the presence of an amplification product specific for Map in the PCR reaction mixture indicates that the animal is infected with Map.

The claims (1-14) require the detection of Map infection in an animal by subjecting a biological sample obtained from the animal to PCR (polymerase chain reaction). The breadth of the claims encompasses subjecting the biological sample to PCR directly without first extracting DNA from the biological sample.

The specification teaches that blood and milk samples collected from dairy cows are processed to extract DNA and that after DNA extraction, lysates and on occasion cellular debris were submitted for PCR (page 6 last bridging paragraph to page 7 lines 1-7, lines 12-18). The specification does not teach that blood and milk or other biological samples were subjected to PCR without first extracting DNA. The art at the time of the instant invention teaches that it is routine to first extract DNA from biological samples before PCR for the detection of Map infection. Generally, the art teaches that diagnostic PCR is limited, in part by the presence of inhibitory substances in complex biological samples (e.g. blood, milk, faeces and meat) which may interfere with the cell lysis step, inactivate the thermostable DNA polymerase and/or interfere with nucleic acids (Waleed et al. Journal of Clinical Microbiology, Dec. 2000 p. 4463-4470, see abstract and introduction, Powell et al. Letters in Applied Microbiology, 1994, vol. 18, p.59-61), and that most PCR –based tests designed, rely on a DNA or target (bacteria or virus) purification step (Panaccio et al. Nucleic Acids Research vol. 19 p. 1151). Although such difficulties in PCR amplification of target DNA directly from biological samples can be overcome by the use of alternative thermostable DNA polymerase resistant to inhibitors or by using amplification facilitators such as bovine serum albumin (Waleed et al, Panaccio et al, cited above), the biological samples still have to be diluted to reduce the effects of inhibitory substances present in said samples. Specifically, the art has not taught that such methods have been applied to and are sensitive for detecting Map infection directly from biological samples and it is unpredictable how sensitive such

methods are especially if the titers of the Map bacterium is low in the sample to begin with.

As to claims 1-5, the specification, while being enabling for a method of detecting Map infection in an animal the method comprising DNA extraction from a biological sample obtained from the animal, subjecting the extracted DNA to PCR using primers SEQ ID NO 1 and SEQ ID NO 2, detecting a 333 base pair amplification product wherein the presence of said 333 base pair amplification product indicates that the animal is infected with Map,

does not reasonably provide enablement for a method of detecting Map infection by PCR amplification of extracted DNA using any two primers. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

The claims are drawn to a method for detecting a Map infection in an animal, the method comprising the steps of: (A) providing a biological sample from the animal; and (B) subjecting the biological sample to PCR using primers J1 and J2, wherein the presence of an amplification product specific for Map in the PCR reaction mixture indicates that the animal is infected with Map.

The breadth of the claims encompasses detection of Map (*Mycobacterium avium paratuberculosis*) infection by PCR (polymerase chain reaction) using any two primers. The recitation of primers J1 and J2 in the claims does not impart any limitations to the identity of the primers in terms of their nucleotide sequence and does not impart any limitations as to the amplification product specific for Map. The specification does not define J1 and J2 in any particular manner.

Hence, the claims are drawn to PCR detection of Map infection using any two primers and therefore any non-specific PCR amplification product.

The claims require detection of an amplification product specific for Map infection. The specification teaches that primers designated SEQ ID 1 and SEQ ID 2 specific for the IS900 region of the Map genome (page 7 lines 19-23) amplify a 333 bp pair PCR product (page 2 lines 10-14). The specification and the art does not teach PCR detection of DNA sequences of other regions of the Map genome apart from the

IS900 region. The teaching of SEQ ID No:1 and 2 does not direct the skilled artisan to other primer pairs that would work in detecting Map infection.

The art teaches that *Mycobacterium paratuberculosis* is very closely related to common environmental organisms of the *Mycobacterium avium* complex and that the presence of the mycobacterial insertion sequence IS900 in the *Mycobacterium paratuberculosis* genome is highly specific for *Mycobacterium paratuberculosis* (Vary et al. Journal of Clinical Microbiology, May 1990 p.933-937, see pg 933 abstract and introduction). Detection of DNA sequences specific for the IS900 region of the Map genome especially by PCR is routinely used in the art for specific detection of Map infection (Englund et al. Diagn. Microbiol Infect Dis vol. 33 p. 163-171, 1999, Erume et al. African Health Science vol.1 pg. 83-89, 2001, Collins et al. Veterinary Microbiology vol. 36 (1993) p. 289-299). Therefore, a pair of primers designed to amplify (by PCR) a region outside the IS900 region of the Map genome is predicted not to yield an amplification product specific for Map infection since such primers will generate an amplification product does not distinguish Map from other organisms of the *Mycobacterium avium* complex. For example, Collins et al teach that a PCR test based on the ribosomal RNA gene of Map lacked specificity because some other slow growing mycobacteria of the *Mycobacterium avium* complex have an RNA gene with an almost identical sequence (Collins et al. Veterinary Microbiology vol. 36 (1993) p. 289-299, page 290 last paragraph just above materials and methods).

In view of the all the above factors including the breadth of the claims and the claim requirements i.e. detection of Map infection directly from a biological sample by PCR and detection of an amplification product specific for Map, the teachings in the specification and the state of the prior art as set forth above in regards to the detection of Map infection directly from biological samples by PCR using specific primer sequences and the unpredictability of detecting Map infection directly from said samples by PCR, undue experimentation would be required of the skilled artisan to practice the claimed invention.

Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01.

Claims 1 and 6 are the independent claims and are set forth below.

Claim 1 is drawn to a method for detecting a Map infection in an animal, the method comprising
the steps of: (A) providing a biological sample from the animal; and (B) subjecting the biological sample to PCR using primers J1 and J2, wherein the presence of an amplification product specific for Map in the PCR reaction mixture indicates that the animal is infected with Map.

Claim 6 is drawn to a method for detecting a Map infection in an animal, the method comprising the steps of:(A) providing a biological sample from the animal; and (B) subjecting the biological sample to nested PCR using at least a first pair of primers for amplifying the ISO900 region of the Map genome and a second pair of primers for amplifying a portion of the amplified ISO900 region, wherein the presence of an amplification product specific for Map in the PCR reaction mixture indicates that the animal is infected with Map.

The claims as written omit the essential physical step of detecting a PCR product of a particular size. As such the claims further lack antecedent basis for the recitation 'wherein the presence of an amplification product specific for Map in the PCR reaction mixture indicates that the animal is infected with Map'. Applicant can amend claims 1 and 6 to include the method step of detecting a PCR product of a particular size provided there is support for such an amendment in the specification.

As to claim 6, the claim recites ISO900 region of the Map genome while the specification refers to both ISO900 region and IS900 (page 2 line 30, page 7 line 19). The metes and bound of ISO900 in the claim is not clear. Does applicant mean to recite IS900 instead of ISO900?

As to claim 14 which recites the limitation "'wherein the first set of primers consist of the primers P90 and P91', there is insufficient antecedent basis for this limitation in

the claim. The independent claim (claim 6) from which the claim 14 depends recites 'subjecting the biological sample to nested PCR using at least a first pair of primers...'. Since claim 6 recites 'at least a first pair of primers', the phrase 'the first set of primers' recited in claim 14 lacks antecedent basis.

As to the recitation of primers "J1" and "J2" and "P90" and "P91", these are merely laboratory designations and do not provide any structural limitations to said primers. How would the skilled artisan know what these are? The metes and bounds of the recited primers is indefinite as any primer can be given the above laboratory designations.

Claim Rejections - 35 USC § 102 and 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 6,7,8,9,11,14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Englund et al. Diagn. Microbiol Infect Dis vol. 33 p. 163-171, 1999.

The claims are drawn to (claims 1,3) are drawn to a method for detecting a Map infection in an animal, the method comprising the steps of: (A) providing a biological sample from the animal; and (B) subjecting the biological sample to PCR using primers J1 and J2, wherein the presence of an amplification product specific for Map in the PCR

reaction mixture indicates that the animal is infected with Map, wherein the animal is a cow and drawn to

(claims 6,7,8,9, 11,14) a method for detecting a Map infection in an animal, the method comprising the steps of:(A) providing a biological sample from the animal; and (B) subjecting the biological sample to nested PCR using at least a first pair of primers for amplifying the ISO900 region of the Map genome and a second pair of primers for amplifying a portion of the amplified ISO900 region, wherein the presence of an amplification product specific for Map in the PCR reaction mixture indicates that the animal is infected with Map, wherein the animal is a cow.

Englund et al teach a method for the detection of *Mycobacterium avium* ssp *paratuberculosis* in bacterial cultures from bovine tissue and fecal samples (abstract, materials and methods page 164 under mycobacterial strains and growth conditions) comprising subjecting bacterial colonies obtained from bovine tissue and fecal samples to PCR using a first set of primers for amplifying the IS900 region of the *Mycobacterium avium* ssp *paratuberculosis* genome resulting in a first amplication product and a second set of primers for amplifying a portion of the first amplication product resulting in a 210 bp product (page 165 left column under nested PCR and table 1, page 168 left column under 'clinical samples analyzed by nested PCR and with the mimic molecule' and figure 3). The recitation of primers "J1" and "J2" and "P90" and "P91" do not distinguish said primers from that of the art. Therefore, Englund et al meets the limitations of the claims as set forth supra.

Claims 1,3,6, 7,8,9,11,14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Erume et al. African Health Science vol.1 pg. 83-89, 2001.

The claims are drawn to (claims 1,3) are drawn to a method for detecting a Map infection in an animal, the method comprising the steps of: (A) providing a biological sample from the animal; and (B) subjecting the biological sample to PCR using primers J1 and J2, wherein the presence of an amplification product specific for Map in the PCR

reaction mixture indicates that the animal is infected with Map, wherein the animal is a cow and drawn to

(claims 6,7,8,9,11,14) a method for detecting a Map infection in an animal, the method comprising the steps of:(A) providing a biological sample from the animal; and (B) subjecting the biological sample to nested PCR using at least a first pair of primers for amplifying the ISO900 region of the Map genome and a second pair of primers for amplifying a portion of the amplified ISO900 region, wherein the presence of an amplification product specific for Map in the PCR reaction mixture indicates that the animal is infected with Map, wherein the animal is a cow.

Erume et al teach a method of detecting *Mycobacterium avium* ssp *paratuberculosis* infection in cattle comprising the steps of providing a biological sample from cattle (pg. 84 see samples under methods), subjecting the biological sample to PCR using a first pair of primers para 1 and para 4 based on IS900 of *Mycobacterium avium* ssp *paratuberculosis* and a second pair of primers (para 2 and para 3) which recognize sequences contained within the sequence amplified by para 1 and para 4 (see pg. 85 under analysis of clinical samples with nested PCR and table 1).

The recitation of primers "J1" and "J2" and "P90" and "P91" do not distinguish said primers from that of the art. Therefore, Erume et al meets the limitations of the claims as set forth supra.

Claims 1,3, 4,5, 6,7,8,9 11, 12, 13, 14 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Herrewegh et al. EP 1223225A1 published July 17, 2002.

The claims are drawn to (claims 1,3, 4, 5) are drawn to a method for detecting a Map infection in an animal, the method comprising the steps of: (A) providing a biological sample from the animal; and (B) subjecting the biological sample to PCR using primers J1 and J2, wherein the presence of an amplification product specific for Map in the PCR reaction mixture indicates that the animal is infected with Map, wherein the animal is a cow, wherein the biological sample is blood, wherein the biological sample is milk and

claims (6,7,8,9,11,12, 13,14) drawn to a method for detecting a Map infection in an animal, the method comprising the steps of:(A) providing a biological sample from the animal; and (B) subjecting the biological sample to nested PCR using at least a first pair of primers for amplifying the ISO900 region of the Map genome and a second pair of primers for amplifying a portion of the amplified ISO900 region, wherein the presence of an amplification product specific for Map in the PCR reaction mixture indicates that the animal is infected with Map, wherein the animal is a cow, wherein the biological sample is blood, wherein the biological sample is milk.

Herrewegh et al teach a method for detection of *Mycobacterium avium* ssp *paratuberculosis* (Mycobacterium paratuberculosis) by providing a biological sample such as blood, feces, urine, saliva, tissue or milk from an animal (page 4 paragraph 16) and subjecting the biological sample to PCR using a first set of primers (IS900-01 and IS900-04) for amplifying the IS900 region of Mycobacterium avium ssp paratuberculosis genome and second pair of primers for further amplication of the first amplication product (primers IS900-02 and IS900-03) (page 6 paragraph 25-27). The presence of a 159 bp amplication product at the end of the nested PCR procedure on the biological sample indicated the presence of infection Mycobacterium avium ssp paratuberculosis (page 6 paragraph 29). Herrewegh et al teach the method of detection of Mycobacterium avium ssp paratuberculosis as described above in cows.

The recitation of primers "J1" and "J2" and "P90" and "P91" do not distinguish said primers from that of the art. Therefore, Herrewegh et al meets the limitations of the claims as set forth supra.

Claims 1,2,3, 5, 6, 7, 8, 9,10, 11, 13,14 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Corti et al. BMC Microbiology 2002, 2:15.

The claims are drawn to (claims 1,2,3, 5) are drawn to a method for detecting a Map infection in an animal, the method comprising the steps of: (A) providing a biological sample from the animal; and (B) subjecting the biological sample to PCR using primers J1 and J2, wherein the presence of an amplification product specific for

Map in the PCR reaction mixture indicates that the animal is infected with Map, wherein the Map infection is subclinical, wherein the animal is a cow, wherein the biological sample is milk and

(claims 6,7,8,9,10,11,13,14) drawn to a method for detecting a Map infection in an animal, the method comprising the steps of:(A) providing a biological sample from the animal; and (B) subjecting the biological sample to nested PCR using at least a first pair of primers for amplifying the ISO900 region of the Map genome and a second pair of primers for amplifying a portion of the amplified ISO900 region, wherein the presence of an amplification product specific for Map in the PCR reaction mixture indicates that the animal is infected with Map, (claim 10) wherein the Map infection is subclinical, (claim 11) wherein the animal is a cow, (claim 13) wherein the biological sample is milk.

Cortis et al teaches a method for determining the herd level prevalence of Mycobacterium avium ssp paratuberculosis (MAP) infection in diary herds (conclusion of abstract section) comprising the steps of providing biological sample (milk) obtained from dairy herds and subjecting the biological sample to PCR using a first pair of primers, primers P90 and P91 for amplifying the IS900 Map specific insertion sequence and a second pair of primers for amplifying of the first amplication product produced with primers P90 and P91 (materials and methods pg 4-6). Cortis et al teach that the prevalence of 19.7% IS900 PCR positive milk samples showed a wide distribution of subclinical MAP infections in dairy stock.

The recitation of primers "J1" and "J2" and "P90" and "P91" do not distinguish said primers from that of the art. Therefore, Corti et al meets the limitations of the claims as set forth supra.

Status of the Claims

Claims 1-14 are rejected and claims 15-20 have been withdrawn.

Conclusion

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oluwatosin Ogunbiyi whose telephone number is 571-272-9939. The examiner can normally be reached on M-F 8:30 am - 5:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisory Examiner Jeffery Siew can be reached on 571-272-0787.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Oluwatosin Ogunbiyi
Examiner
Art Unit 1645